

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A hydrocarbon cracking catalyst in which zeolite is fixed in the pores of a metal oxide, ~~support~~ wherein the zeolite has a structure of MFI, MEL, TPN, MTT or FER.

2. (Currently Amended) The hydrocarbon cracking catalyst of claim 1, wherein the zeolite is ~~comprised in~~ 0.1-30 wt% per 100 wt% of the metal oxide ~~support~~.

3. (Canceled)

4. (Original) The hydrocarbon cracking catalyst of claim 1, wherein the metal oxide has a shape selected from the group consisting of a sphere, a Raschig ring and a Leschig ring.

5. (Original) The hydrocarbon cracking catalyst of claim 1, wherein the metal oxide is selected from the group consisting of α -alumina, silica, silica-alumina, zirconium oxide, magnesium oxide, magnesium aluminate and calcium aluminate.

6. (Canceled)

7. (Original) The hydrocarbon cracking catalyst of claim 1, wherein the zeolite is a HZSM-5 catalyst or a catalyst in which metal constituents are ion-exchanged or impregnated in HZSM-5.

8. (Currently Amended) A method for preparing a hydrocarbon cracking catalyst comprising the steps of:

- a) vacuumizing a container including a metal oxide;
- b) ~~adding~~ mixing a zeolite ~~powder in with~~ water and ~~stirring it~~ to obtain a slurry solution, wherein the zeolite has a structure of MFI, MEL, TPN, MTT or FER;
- c) spraying the slurry solution of step (b) into the vacuous container to penetrate ~~[[it]]~~ the slurry solution into the pores of the metal oxide ~~support~~ to obtain the catalyst; and
- d) drying the catalyst prepared in step (c) and calcining ~~[[it]]~~ the catalyst to fix the zeolite ~~powder~~ in the metal oxide ~~support~~.

9. (Canceled)

10. (Original) The method of claim 8, wherein the metal oxide has a shape selected from the group consisting of a sphere, a Raschig ring and a Leschig ring.

11. (Original) The method of claim 8, wherein the metal oxide is selected from the group consisting of α -alumina, silica, silica-alumina, zirconium oxide, magnesium oxide, magnesium aluminates and calcium aluminate.

12. (Canceled)

13. (Original) The method of claim 8, wherein the zeolite is a HZSM-5 catalyst or a catalyst in which metal constituents are ion-exchanged or impregnated in HZSM-5.

14. (Currently Amended) The method of claim 8, wherein the zeolite is ~~comprised in~~ 0.1-30 wt% per 100 wt% of the metal oxide ~~support~~.